

MANSFIELD FIRE DEPARTMENT INFORMATION LINE

FIRE INDEX

Requirements for Spray Booth

- An approved automatic fire extinguishing system shall be provided for an Extra Hazard Group 2 occupancy with fire sprinkler heads or nozzles installed to cover the duct, spray area, and behind the filters. Plans shall be submitted to the Fire Department for review and approval prior to starting work.
- “NO SMOKING” signs posted in the spraying area.
- “NO WELDING” signs posted in the area.
- Only manufactured booths of steel not less than 0.044 inch (18 gauge) in thickness are acceptable.
- Any paint booth having a floor area of 200 sq. ft. or more shall be served by at least two exits. The area of a paint spray booth shall not exceed 10 percent of the basic area permitted for the major use of the building.
- The interior surfaces must be smooth, without edges, for cleaning purposes.
- Each spray booth having a frontal area of more than nine sq. ft. and not equipped with doors shall have a 4-1/2 inch deep metal deflector installed at the upper outer edge of the booth opening.
- No storage is allowed within three (3) feet and no welding within twenty (20) feet of the booth.
- All lights must be behind heat treated or hammered wire glass. (NO PORTABLE LIGHTS)
- Wiring and electrical fixtures inside the booth must be designed and utilize devices UL Listed for Class 1, Division 1 locations.
- Air velocity through the booth during spraying operation shall be not less than one hundred (100) linear feet per minute.
- Approved UL Listed filters shall be used.

- Space heaters or hot surfaces are prohibited inside spray booths.
- No electrical equipment is allowed in booth unless it is Listed by UL for Class 1, Division 1 locations and located to avoid deposits of combustible residues.
- All metal parts of the spray booth, exhaust ducts, or flammable liquid piping system shall be properly electrically grounded.
- Electrical equipment shall be interlocked with the ventilation equipment so that the equipment cannot be operated unless the vent fans are on.
- Each spray booth shall have an exhaust duct discharging to the building exterior (through the roof is preferred, through the wall is acceptable, if not a fire hazard or a nuisance to neighbors).
- Exhaust fan motors shall not be placed inside booths or ducts. Fan blades shall be nonferrous or non-sparking or the casing shall be lined with such material. Fan motor shall be UL Listed for Class 1, Division 1 locations.
- Fan belts and pulleys within the duct or booth shall be tightly enclosed.
- Exhaust ducts shall be constructed of steel having a thickness of not less than:

8 " or less-----No. 24 gauge
over 8 " to 18 "-----No. 22 gauge
over 18 " to 30 "-----No. 20 gauge
over 30 "-----No. 18 gauge

- The discharge point for exhaust ducts shall be at least six (6) feet away from combustible construction and twenty-five (25) feet away from doors or windows.
- Exhaust ducts shall have an eighteen (18) inch clearance from unprotected combustible construction or materials.
- Exhausted air shall not be re-circulated.
- The exhaust air intake ducts shall be extended to pick up flammable vapors within six (6) inches of the floor.

All of the above requirements must be approved by the Fire Prevention Division prior to and after construction. **PLANS SHALL BE SUBMITTED TO THE FIRE INSPECTIONS DEPARTMENT TO INSTALL THE BOOTH.**